Washington State Institute for Public Policy

Benefit-Cost Results

Parents as Teachers

Benefit-cost estimates updated December 2014. Literature review updated April 2012.

Current estimates replace old estimates. Numbers will change over time as a result of model inputs and monetization methods.

The WSIPP benefit-cost analysis examines, on an apples-to-apples basis, the monetary value of programs or policies to determine whether the benefits from the program exceed its costs. WSIPP's research approach to identifying evidence-based programs and policies has three main steps. First, we determine "what works" (and what does not work) to improve outcomes using a statistical technique called meta-analysis. Second, we calculate whether the benefits of a program exceed its costs. Third, we estimate the risk of investing in a program by testing the sensitivity of our results. For more detail on our methods, see our technical documentation.

Program Description: Parents as Teachers (http://www.parentsasteachers.org/) is a home visiting program for parents and children with a main goal of having children ready to learn by the time they go to school. Parents are visited monthly by parent educators with some college education. Visits typically begin during the mother's pregnancy and may continue until the child enters kindergarten.

Benefit-Cost Summary								
Program benefits		Summary statistics						
Participants	\$2,109	Benefit to cost ratio	\$1.07					
Taxpayers	\$988	Benefits minus costs	\$191					
Other (1)	\$820	Probability of a positive net present value	50 %					
Other (2)	(\$1,041)							
Total	\$2,875							
Costs	(\$2,684)							
Benefits minus cost	\$191							

The estimates shown are present value, life cycle benefits and costs. All dollars are expressed in the base year chosen for this analysis (2013). The economic discount rates and other relevant parameters are described in our technical documentation.

Detailed Monetary Benefit Estimates Benefits to Source of benefits **Participants Taxpayers** Other (1) Other (2) Total benefits From primary participant Crime \$0 \$0 (\$1)\$0 (\$1)Subtotals \$0 \$0 (\$1) \$0 (\$1) From secondary participant Crime \$0 \$138 \$402 \$69 \$609 Labor market earnings (test scores) \$912 \$389 \$450 \$0 \$1,751 Child abuse and neglect \$1,202 \$378 \$0 \$189 \$1,769 K-12 special education \$0 \$40 \$0 \$20 \$60 Property loss (alcohol abuse/dependence) \$0 \$0 \$0 \$0 \$1 Health care (educational attainment) (\$6)\$43 (\$32)\$22 \$27 \$2,109 \$988 \$820 \$300 \$4,217 Subtotals Adjustment for deadweight cost of program \$0 \$0 \$0 (\$1,341)(\$1,341)

We created the two "other" categories to report results that do not fit neatly in the "participant" or "taxpayer" perspectives. In the "Other (1)" category we include the benefits of reductions in crime victimization and the economic spillover benefits of improvement in human capital outcomes. In the "Other (2)" category we include estimates of the net changes in the value of a statistical life and net changes in the deadweight costs of taxation.

\$988

\$820

(\$1,041)

\$2,875

\$2,109

Totals

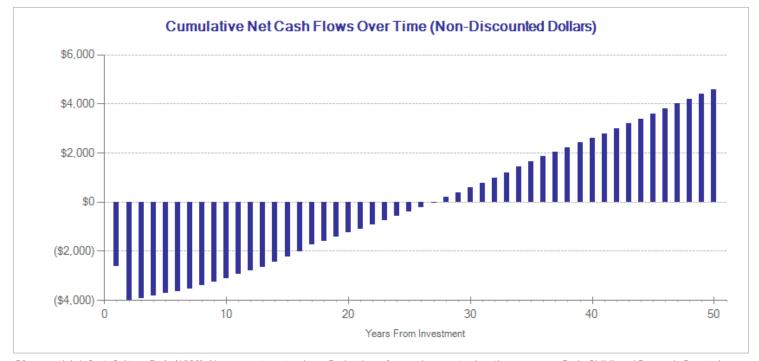
Detailed Cost Estimates									
	Annual cost	Program duration	Year dollars	Summary statistics					
Program costs Comparison costs	\$1,450 \$0	1.5 1.5	2003 2003	Present value of net program costs (in 2013 dollars) Uncertainty (+ or - %)	(\$2,684) 10 %				

Average annual cost provided by Parents as Teachers National Center in 2003. Average length of program estimated by WSIPP, based on weighted average of treatment length reported in the original research studies. WSIPP also communicated with Nicole Thomson at the National Center (July 2014), who provided assistance in gathering some details not reported in the original studies.

The figures shown are estimates of the costs to implement programs in Washington. The comparison group costs reflect either no treatment or treatment as usual, depending on how effect sizes were calculated in the meta analysis. The uncertainty range is used in Monte Carlo risk analysis, described in our technical documentation.

Meta-Analysis of Program Effects											
Outcomes measured Primary or secondary participant		No. of effect	Treatment N	Unadjusted effect size (random effects model)		Adjusted effect sizes and standard errors used in the benefit- cost analysis					
	participant	sizes				First time ES is estimated			Second time ES is estimated		
				ES	p-value	ES	SE	Age	ES	SE	Age
High school graduation	Primary	1	79	-0.018	0.926	-0.018	0.189	22	-0.018	0.189	22
Repeat teen birth	Primary	1	77	0.089	0.678	0.089	0.215	22	0.089	0.215	22
Test scores	Secondary	5	625	0.086	0.271	0.086	0.084	4	0.018	0.092	17
Child abuse and neglect	Secondary	1	149	-0.378	0.482	-0.378	0.537	3	-0.378	0.537	13
High school grad via test scores	Secondary	n/a	0	n/a	n/a	0.006	0.028	17	0.006	0.028	17

Citations Used in the Meta-Analysis



Pfannenstiel, J. C., & Seltzer, D. A. (1989). New parents as teachers: Evaluation of an early parent education program. *Early Childhood Research Quarterly,* 4(1), 1-18.

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Wagner, M., Cameto, R., & Gerlach-Downie, S. (1996). Intervention in support of adolescent parents and their children: A final report on the Teen Parents as Teachers Demonstration. Menlo Park, CA. SRI International.

Wagner, M., Spiker, D. (with Hernandez, F., Song, J., & Gerlach-Downie, S.). (2001). *Multisite Parents as Teachers evaluation: Experiences and outcomes for children and families (SRI Project P07283)*. Menlo Park, CA: SRI International.

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Printed on 02-23-2015



Washington State Institute for Public Policy

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